

ABSTRACT

A computer system and method generate a semantic representation of one or more XML language inquiries across relational and non-relational data sources. A semantic intermediate language representation explicitly describes the meaning of the one or more XML language inquiries. The semantic intermediate language may be a graph structure with nodes which describe the operations of the original query. Operators assigned to the nodes in the semantic graph allow an unambiguous definition of the original XML query. The semantic intermediate language may be used to perform XML queries over single or multiple data sources. A method includes receiving at least one inquiry, defining at least one node object for every operation within the received inquiry, translating each node object using operators, and generating a semantic representation from the operators.